Two New Species of Senecio (Asteraceae, Senecioneae) from Argentina

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ABSTRACT. Two new species of Senecio L. from Argentina, S. fragrantissimus and S. pumilus, are described and illustrated. Both species belong to Senecio ser. Xerosenecio (Cabrera) Cabrera & S. E. Freire and are allied to S. filaginoides DC., from which S. fragrantissimus differs by its ascending branches with needle-like leaves crowded along the stems, and S. pumilus diverges by its dwarf cushion-like habit and elliptic, thicker leaves. A key is included to those species affined to S. filaginoides.

RESUMEN. Se describen e ilustran dos nuevas especies de Senecio L. de Argentina, S. fragrantissimus y S. pumilus. Ambas pertenecen a Senecio serie Xerosenecio (Cabrera) Cabrera & S. E. Freire y son afines a S. filaginoides DC., de la cual S. fragrantissimus difiere por sus ramas ascendentes con hojas aciculares aglomeradas a lo largo de las ramas, y S. pumilus diverge por formar cojines con hojas elípticas más crasas. Se incluye una clave para las especies afines a S. filaginoides.

Key words: Argentina, Asteraceae, Compositae, Senecio.

The series *Xerosenecio* (Cabrera) Cabrera & S. E. Freire of the genus *Senecio* L. sect. *Senecio* (sensu Cabrera et al., 1999) is characterized by a ligneous habit and discoid capitula disposed in terminal corymbs. Cabrera (1949) and Cabrera et al. (1999) included 39 species in this series, distributed in Argentina and Chile, with only one species (*S. vira-vira* Hieronymus) also in Uruguay and in southeastern Brazil in the state of Rio Grande do Sul.

During a taxonomic revision of *Senecio* ser. *Xe-rosenecio*, we found two new species from Argentina, both affined to *Senecio filaginoides* DC. by their woolly stems, leaves, and phyllaries, and by their narrowly cylindric or obconical involucres, less than 8 mm high, composed of 10 to 14 phyllaries.

Senecio fragrantissimus Tortosa & A. Bartoli, sp. nov. TYPE: Argentina. San Luis: Pringles, Saladillo, "Flores color crema, perfumadas," 9 Nov. 1940, G. Covas 1337 (holotype, LP). Figure 1.

Affinis Senecioni filaginoidi DC. sed ramis hornotinis ascendentibus foliis acicularis congestis notabilis differt.

Shrub 50-80 cm, mostly ramified from the base, lanuginose or sublanuginose on stems, leaves, and phyllaries; stems ascending with very short internodes from midstem upward. Leaves alternate, sessile, acicular, \pm spreading, 0.9–3.5 \times 0.04–0.06 cm, margin revolute, lanuginose or sublanuginose on both surfaces. Capitula pedunculate, arranged 5 to 15 in terminal corymbs; peduncles 0.5-1.3 cm long, involucre calyculate, cylindric, $6-8 \times 2.5-3$ mm; phyllaries 10 to 12, linear ovate, $6-8 \times ca$. 1 mm, dorsally lanuginose or sparsely lanuginose, apex acuminate with a tuft of short trichomes; calycular bracts ca. 4, linear, ca. 1.5 mm long, dorsally lanuginose. Disc florets 22 to 25, hermaphroditic, corolla cream, tubular, 5-lobed, 7-7.5 mm long, glabrous, basally broadened, limb slightly broader than the tube and not markedly distinct, lobes narrowly triangular, ca. 0.6 mm long, at base 0.3 mm wide; anthers minutely tailed, ca. 2-2.5 mm long; filament collars spatulate ca. 0.5 mm long; apical anther appendage obovate, ca. 0.4 mm long; basal tails ca. 0.15 mm long. Style branches ca. 1.5 mm long. Achenes cylindric, pubescent, ca. 3 mm, costate; pappus bristles many, slender, barbellate, 7-8 mm long, whitish.

Distribution and habitat. Senecio fragrantissimus is known only from two neighboring localities in the political province of San Luis of western Argentina, in xerophytic habitats with sandy soil at 800 m.

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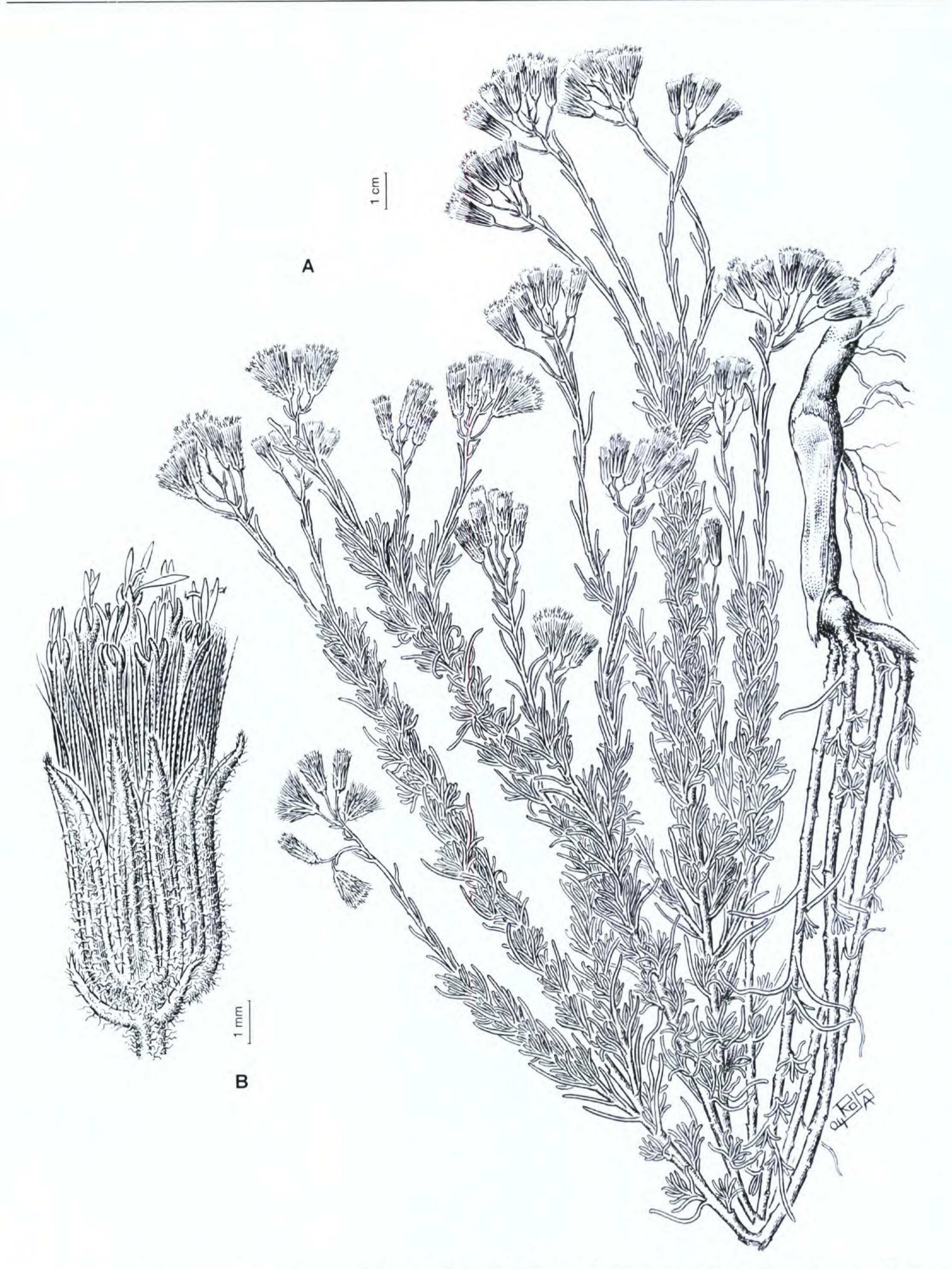


Figure 1. Senecio fragrantissimus Tortosa & A. Bartoli. —A. Habit. —B. Capitulum. Drawn from the type, G. Covas 1337 (LP).

Etymology. The specific epithet makes reference to the fragance to which all collectors of this species alluded.

Senecio fragantissimus is allied to S. filaginoides,

a species with a wide distribution in Argentina (Cabrera et al., 1999). The new species differs from the latter by its needle-like leaves, crowded together due to congestion of the upper stem internodes,

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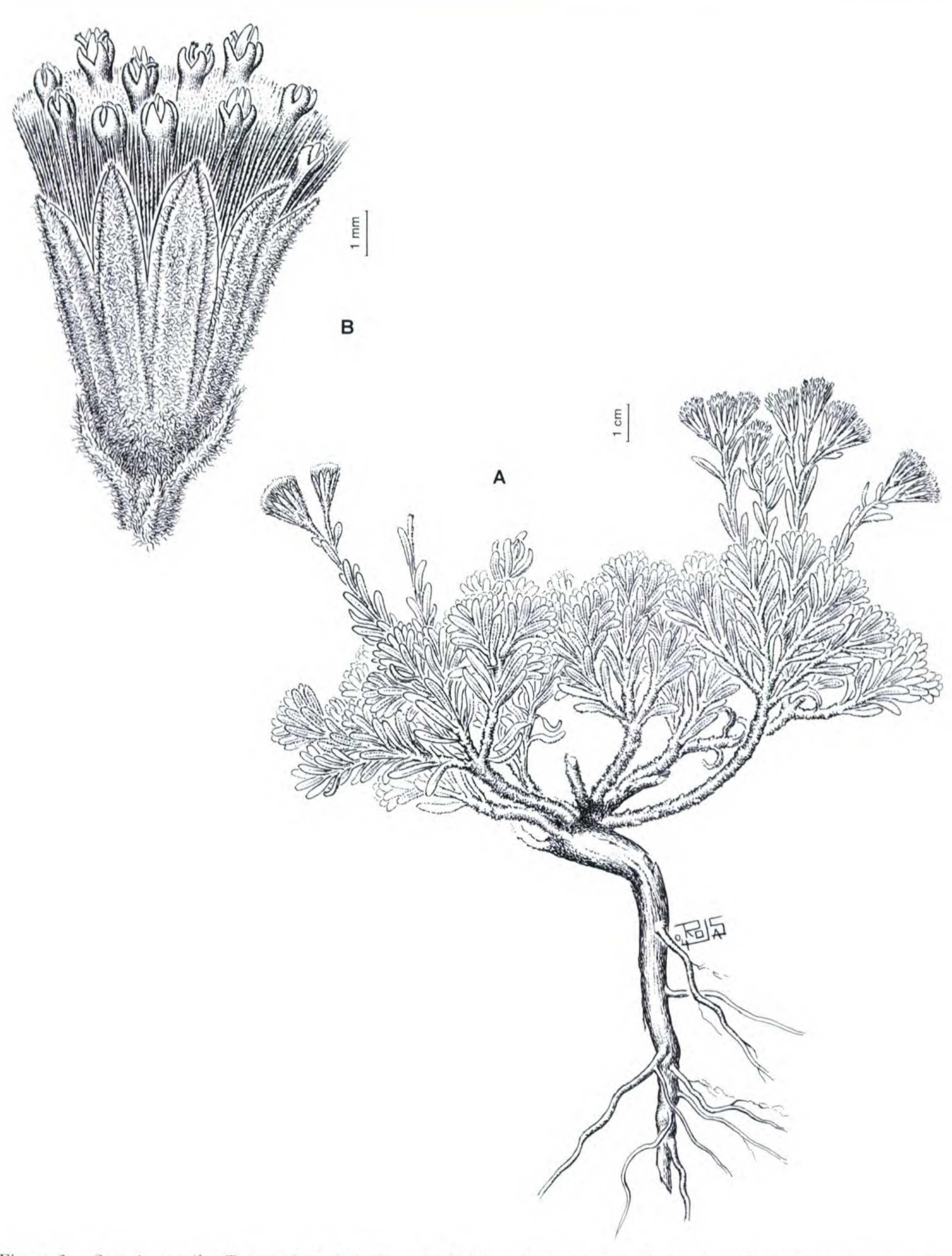


Figure 2. Senecio pumilus Tortosa & A. Bartoli. —A. Habit. —B. Capitulum. Drawn from the type, E. Ancibor y H. Schwabe s.n. (BAA 5789).

giving the branches and their foliage a cylindrical appearance. A similar aspect may be seen in some specimens of S. bracteolatus Hooker & Arnott (O. Boelcke 4289 (BAA), A. Havrylencco 6 and 7 (BAA), Vallerini 339 (BAA)), but this species is

glabrous and its heads have a campanulate involucre.

Paratypes. ARGENTINA. San Luis: Pringles, Saladillo, 9 Nov. 1940, A. Burkart (LP); 9 Nov. 1940, G. Covas 1001 (LP); General Pedernera, al pié del Cerro El Morro,

cerca de la Ea. La Morena, 18 Oct. 1951, A. T. Hunziker 9287 (LP).

Senecio pumilus Tortosa & A. Bartoli, sp. nov. TYPE: Argentina. Mendoza: Malargüe, Portezuelo del Choique, 2400 m s.m., 12 Mar. 1967, E. Ancibor & H. Schwabe s.n. (holotype, BAA 5789). Figure 2.

Inter species seriei *Xerosenecionis* indumento lanato, capitulis parvis in corymbis dispositis, involucro angusto ad *S. filaginoidem* DC. accedens sed statura minore, foliis ellipticis crassioribus involucro obconico ab ea recedens.

Dwarf shrubs 8-30 cm, much branched at the base, stems, leaves, and phyllaries densely whitish lanuginose; stems prostrate subligneous giving rise at their nodes to herbaceous ascending shoots. Leaves alternate, sessile, $0.8-2 \times 0.15-0.30$ cm, elliptic, obtuse or rounded at the apex, margin revolute, densely lanuginose on both surfaces. Capitula pedunculate, peduncles 0.5-1.5 cm long, arranged 3 to 6 in terminal corymbs; involucre calveulate, obconical, $6-7 \times 3-3.5$ mm; phyllaries 8 to 12, 6–7 \times 1–1.2 mm, dorsally lanuginose, apex acuminate with short trichomes; calycular bracts ca. 5, elliptic, ca. 1-1.5 mm long, dorsally lanuginose. Disc florets ca. 20 to 24, hermaphroditic, corolla yellow, tubular, 6-6.5 mm long, glabrous, basally broadened, narrowly campanulate, lobes triangular, ca. 0.5 mm long, at base 0.3 mm wide; anthers minutely tailed, 2-2.5 mm long; filament collars spatulate, ca. 0.25 mm long; apical anther appendages deltoid, ca. 0.3 mm long; the basal tails ca. 0.1 mm long. Style branches ca. 1.2 mm long. Achenes cylindric, glabrous, ca. 3.5 mm, costate. Pappus bristles many, slender, barbellate, ca. 6 mm long, whitish.

The heads of *Senecio pumilus* are similar to those of *S. filaginoides*, but its dwarf cushion-shaped habit, not taller than 30 cm (vs. erect, 0.5–1 m tall in *S. filaginoides*), its elliptic, entire, thicker leaves (vs. linear to linear-elliptic in *S. filaginoides*), and its obconical involucre (vs. cylindric in *S. filaginoides*) distinguish the new species.

Distribution and habitat. Senecio pumilus has

been found in the eastern Mendoza and Neuquén in Argentina, at elevations of 1900–2500 m of the Andes Mountains, an arid region with cool weather exposed to strong winds.

Etymology. The specific epithet makes reference to the habit of the species.

Paratypes. ARGENTINA. Mendoza: Malargüe, Portezuelo del Choique, E. Ancibor & H. Schwabe s.n. (BAA 5784); Ca. Portezuelo del Choique, J. H. Hunziker 6381 (BAB); Malargüe, A. Burkart, N. S. Troncoso & E. G. Nicora s.n. (SI 14338); Cerros al N de Calmuco, A. Burkart s.n. (SI 14330); Laguna Coipo-Leuquen, al S de Calmuco, A. Burkart, N. S. Troncoso & E. G. Nicora s.n. (SI 14340); 6 km N de Calmuco, G. Covas 412 (LP); Entre Calmuco y Pto. Los Colgados, A. Prina, G. Alfonso & W. Muiño 1870 (SRFA); in montanis Valle del Yeso, Gerling s.n. (LP). Neuquén: Minas, Cordillera del Viento, arroyo Dos Puentes, F. Pastore 3 (SI).

KEY TO SPECIES ALLIED TO SENECIO FHAGINOIDES

- 1a. Leaves acicular, less than 0.6 mm wide Senecio fragrantissimus Tortosa & A. Bartoli
- 1b. Leaves linear or elliptic, 1.5–3 mm wide.
 - 2a. Phyllaries 7 to 8; florets 10 to 12 Senecio pycnanthus Philippi
 - 2b. Phyllaries 10 to 14; florets 18 to 26.
 - 3a. Shrubs 0.08–0.30 m high; leaves elliptic, entire; involucre obconical
 Senecio pumilus Tortosa & A. Bartoli

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